

Prof. (Dr.) Maitree Bhattacharyya

Email ID : bmaitree@gmail.com

Department of Biochemistry

University of Calcutta **Phone No. 9830306307**

35, Ballygunge Circular Road

Kolkata 700 019, India

Prof. (Dr.) Maitree Bhattacharyya graduated from Presidency College with Honours in Physics and obtained M.Sc degree from Calcutta University. Started research career in Department of Biophysics and Molecular Biology, Calcutta University with a PhD degree in 1991. She pursued research with Research Associateship from CSIR and joined Calcutta University as an Assistant Professor in 1994 to start with independent research laboratory. Later on, she was awarded DBT Overseas fellowship and worked as Visiting Scientist in UCSD, USA. Now she is the Professor, Department of Biochemistry and University of Calcutta (On lien). Prof. (Dr.) Maitree Bhattacharyya joined as Director at Jagadis Bose National Science Talent Search from 15th January, 2015. Fifteen students have already been awarded PhD degree under her supervision and now she is leading a group of eight research scholars which comprises of PhD and post-doctoral students. She has published several research articles and chapters in books of International repute.

Details of Sanctioned Projects since 2010 :

Sl. No.	Project Title	Funding agency	Year	Total sanctioned amount
1.	Cataloguing the microbial diversity of Sundarbans in the back drop of climate change	World Bank	2010-2017	620 lakhs
2.	Inventorization and database creation on microbial diversity along Indian coast	NCSCM (MOEF, GOI)	2015-2017	68 lakhs
3.	Relevance of Adiponectin Metabolism in type 2 diabetes; A biochemical and genetic perspective	UGC-MRP	2015-2018	15.60 lakhs
4.	Alteration of Protein conformation by ionizing radiation and possible protection by antioxidants	UGC-DAE CSR	2013-2017	16.80 lakhs

Publications in peer-reviewed journals

List of Publication for last three years	Impact Factor
1) AnishBhattacharyyaa, AnweshHaldar, MaitreeBhattacharyyaa, AbhrajyotiGhosh Anthropogenic influence shapes the distribution of antibiotic resistant bacteria (ARB) in the sediment of Sundarban estuary in India. Science of the Total Environment. Volume 647, 10 January 2019, Pages 1626-1639	4.61
2) Roy D, Pramanik A, Banerjee S, Ghosh A, Chattopadhyay D, Bhattacharyya M (2018) Spatio-temporal variability and source identification for metal contamination in the river sediment of Indian Sundarbans, a world heritage site. Environmental Science and Pollution Research, 25, 31326–3134	2.8
3) RudradipPattanayak,AtishBarua,AmlanDas,TanimaChatterjee, AdrijaPathak,PrithaChoudhury,SrikantaSen,ProsenjitSaha,Maitree Bhattacharyya. Porphyrinstorestrict progression of Pancreatic Cancer by stabilizing KRASG-quadruplex :Insilico ,invitro and invivo validation of anticancer strategy. Eur J Pharm Sci doi.org/10.1016/j.ejps.2018.09.011	3.46
4) Nag S, Pramanik A, Chattopadhyay D, Bhattacharyya M (2017) Green-fabrication of gold nanomaterials using Staphylococcus warneri from Sundarbans estuary: An effective recyclable nano-catalyst for degrading nitro-aromatic pollutants. Environmental Science and Pollution Research, DOI: 10.1007/s11356-017-0617-7	2.8
5) Ahana Das , PijushBasak , ArnabPramanick , RajibMajumder , Debadrita Pal , AvishekGhosha, ManasGuria , Maitree Bhattacharyya b, SamudraProsadBanik. Trehalose mediated stabilisation of cellobiase aggregates from the filamentous fungus Penicilliumchrysogenum. International Journal of Biological Macromolecules, 127 (2019) 365–375.	3.7
6) Ahana Das, PijushBasak, RudradipPattanayak, Turban Kar, RajibMajumder, Debadrita Pal, Anindita Bhattacharya, Maitree Bhattacharyya , SamudraProsadBanik, Trehalose induced structural modulation of Bovine Serum Albumin at ambient temperature , International Journal of Biological Macromolecules, 2017, doi.org/10.1016/j.ijbiomac.2017.07.07	3.7
7) RK Ghosh, T Kar, B Dutta, A Pathak, R Rakshit, R Basak, A Das, K Waheeda, P Basak, M Bhattacharyya. Aberration in the structural paradigm of lens protein α crystallin by UV-C irradiation. Applied Biological Chemistry ,2018, 61(3), 281-287.	1.36
8) Turban Kar, PijushBasak, Rittik Kumar Ghosh, Maitree Bhattacharyya, Analysis of Curcumin interaction with Human Serum Albumin using spectroscopic studies with molecular Simulation, Front. Biol. 2017, 12(3): 199–209). DOI 10.1007/s11515-017-1449-z	
9) SudeshnaChowdhurya, SamudraProsadBanika, RajibMajumder, ShakuntalaGhorai, Swagata Pal, PijushBasak ,SumanKhowala , Prevention of protein aggregation by extracellular fungal sucrose of Termitomycesclypeatus . Turk J Biochem 2017. DOI 10.1515/tjb-2016-0297	0.8
10) SohanSengupta, ArnabPramanik, PijushBasak, Maitree Bhattacharyya, Draft Genome Sequence of Bioactive Strain Streptomyces sp. SMS_SU21, Isolated from Soil Sediment of the Sundarbans Mangrove	1.1

Ecosystem. Genome Announc 2018, 6:e00614-18	
11) K Ghoshal , S Chakraborty , Das C2, S Chattopadhyay , S Chowdhury , M Bhattacharyya . Dielectric properties of plasma membrane: A signature for dyslipidemia in diabetes mellitus. Arch BiochemBiophys. 2017 Dec 1;635:27-36. doi: 10.1016/j.abb.2017.10.002. Epub 2017 Oct 10.	3.11
12) NeelamPrakashBodhale, Subhashis Pal, Sunil Kumar, DebprasadChattopadhyay, BhaskarSaha, Naibedyachattopadhyay, Maitree Bhattacharyya. Inbred mouse strains differentially susceptible to Leishmaniadonovani infection differ in their immune cell metabolism. Cytokine . 2018 ,112,12-15	3.5
13) Sangita Das, KrishnenduAich, LakshmanPatra, KakaliGhoshal, SaswatiGharami, Maitree Bhattacharyya, Tapan Kumar Mondal. Development of a new fluorescence ratiometric switch for endogenous hypochlorite detection in monocytes of diabetic subjects by dye release method. Tetrahedron letters. ,2018 , 59 (12) ,1130-1135	2.12
14) Sima Paul, Rajesh Nandi, KakaliGhoshal, Maitree Bhattacharyya, Dilip Kumar Maiti. A smart sensor for rapid detection of lethal hydrazine in human blood and drinking water. New Journal of Chemistry. 2019	3.2
15) AniruddhaAdhikari, SoumendraDarbar, TanimaChatterjee, Monojit Das, NabarunPolley, Maitree Bhattacharyya, Siddhartha Bhattacharya, Debasish Pal, Samir Kumar Pal. Spectroscopic Studies on Dual Role of Natural Flavonoids in Detoxification of Lead Poisoning: Bench-to-Bedside Preclinical Trial. ACS omega .2018 , 3(11) , 15975-15987	
16) SubarnaDutta, Jitendra K Das, Lakshmi Maganti, Maitree Bhattacharyya, Dhananjay Bhattacharyya, Sujoy Mukherjee, KaushikSengupta. Skeletal Muscle Dystrophy mutant of lamin A alters the structure and dynamics of the Ig fold domain. Scientific reports , 2018, 8(1), 13793	4.1
17) SubarnaDutta, Maitree Bhattacharyya, KaushikSengupta. Changes in the Nuclear Envelope in Laminopathies. Biochemical and Biophysical Roles of Cell Surface Molecules. 2018, 31-38.	1.2
18) Debalina Bhattacharya, MainakMukhopadhyay, Maitree Bhattacharyya, ParimalKarmakar. Is autophagy associated with diabetes mellitus and its complications? A review. EXCLI journal, 2018,17,709	
19) ArnabPramanik ,SohanSengupta, Maitree Bhattacharyya. Microbial Diversity and Community Analysis of the Sundarbans Mangrove, a World Heritage Site. Microbial Diversity in the Genomic Era. 2019, Chapter 5, 65-76.	
20) Rittik Kumar Ghosh ,TurbanKar , PijushBasak* and MaitreeBhattachayya* . Hydrophobic profiling of heated and unheated Leghemoglobin, Myoglobin, Cytochrome c and Hemoglobin proteins in differential pH conditions. International Journal of Scientific and Research Publications, 6(9) , 2016.	1.2
21) NiloyKundu, Rittik Kumar Ghosh, Turban Kar, Maitree Bhattacharyya*, and PijushBasak* , Illustration of fluorescence quenching mechanism of heme proteins using stern volmer quenching system with determination of positioning of tryptophan residues . Journal of Global Biosciences , 2016, 5 : 4579-4584.	0.5
22) ArghyaMukherjee , Bobby Chettri , James Langpoklakpam , PijushBasak , Aravind Prasad. Ashis Mukherjee , Maitree Bhattacharyya , Arvind Singh, DhruvajyotiChattopadhyay, BioinformaticApproaches	4.1

Including Predictive Metagenomic Profiling Reveal Characteristics of Bacterial Response to Petroleum Hydrocarbon Contamination in Diverse Environments, Scientific Reports , 7: 1108 DOI:10.1038/s41598-017-01126-3.	
23) RudrdipPattanayak , PijushBasak , SrikantaSen and Maitree Bhattacharyya, An insight to the binding of Ellagic acid with Human serum albumin using spectroscopic and isothermal calorimetry studies, Biochemistry and Biophysics Reports 2017 , http://dx.doi.org/10.1016/j.bbrep.2017.03.001	0.43
24) RudrdipPattanayak , PijushBasak , SrikantaSen and Maitree Bhattacharyya, Interaction of KRAS G-quadruplex with natural polyphenols: A spectroscopic analysis with molecular modeling , International Journal of Biological Macromolecules , 2016 , 89 , 228–237 http://dx.doi.org/10.1016/j.ijbiomac.2016.04.074	3.67
25) PijushBasak , ArnabPramanik , SohanSengupta , Sudip Nag , Anish Bhattacharyya ,Debojyoti Roy ,RudradipPattanayak , AbhrajyotiGhosh, DhruvajyotiChattopadhyay , Maitree Bhattacharyya, Bacterial diversity assessment of pristine mangrove microbial community from Dhulibhashani, Sundarbans using 16S rRNA gene tag sequencing , Genomics Data ,2016 , 7: 76–78	0.23
26) ArnabPramanik , PijushBasak , Satabdi Banerjee , SanghamitraSengupta , DhruvajyotiChattopadhyay , Maitree Bhattacharyya , Metagenomic exploration of the bacterial community structure at Paradip Port, Odisha, India, Genomics Data ,2016 , 7: 94–96.	0.5
27) Turban Kar, PijushBasak, Rittik Kumar Ghosh, Maitree Bhattacharyya, Protective effects of curcumin against gamma ray induced conformational change of Human Serum Albumin, International Journal of Biological Macromolecules, 99 (2017) 600–607 . http://dx.doi.org/10.1016/j.ijbiomac.2017.02.105	3.67
28) MasasGuria, M majumdar, MaitreeBhattacharyya.Green synthesis of protein capped nano-gold particle: an excellent recyclable nano catalyst for the identification of nitro aromatic pollutants at higher concentration. Journal of Molecular Liquids,2016, 222,549.	2.82
29) Maitree Bhattacharyya KakaliGhoshal, Sangita Das, KrishnenduAich, ShyamaprosadGoswami, SubhankarChowdhury. A novel sensor to estimate the prevalence of hypochlorous (HOCl) toxicity in individuals with type 2 diabetes and dyslipidemia. ClinicaChimica Acta.2016, 458, 144–153.	2.53
30) SubarnaDutta, Maitree Bhattacharyya, KaushikSengupta. Implications and assessment of the elastic behavior of lamins in laminopathies. Cells.2017, 5(4), 37.	3.4
31) Sultan Tousif, Dhiraj Kumar Singh, Sitabja Mukherjee, Shaheer Ahmad, RakeshArya, Ranjan Nanda, AnandRanganathan, Maitree Bhattacharyya, Luc Van Kaer, Santosh K Kar, Gobardhan Das. nanoparticle-Formulatedcurcumin Prevents Posttherapeutic Disease reactivation and reinfection with Mycobacterium tuberculosis following isoniazid Therapy. Frontiers in immunology.2017, 8, 739.	5.51
32) Satabdi Banerjee, ArnabPramanik, SanghamitraSengupta, DhruvajyotiChattopadhyay, Maitree Bhattacharyya. Distribution and source identification of heavy metal concentration in Chilika Lake, Odisha India: an assessment over salinity gradient. Current Science. 2017, 112(1), 87.	0.5
33) PaulamiMandal, JoydeepChowdhury, Maitree Bhattacharya. Targeting G-quadruplex DNA and B-	2.96

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34) Sima Paul, KakaliGhoshal, Maitree Bhattacharyya, Dilip K Maiti. Detection of HSO ₃ ⁻ : A Rapid Colorimetric and Fluorimetric Selective Sensor for Detecting Biological SO ₂ in Food and Living Cells. ACS omega. 2017, 2 (12), 8633-8639.	
35) PijushBasak, TanayDebnath, Rajat Banerjee, Maitree Bhattacharyya. Selective binding of divalent cations toward heme proteins. Frontiers in biology. 2016, 11(1), 32-42.	
36) KakaliGhoshal, SubhadipChakraborty, Chirantan Das, SanatanChattopadhyay, SubhankarChowdhury, Maitree Bhattacharyya .Dielectric properties of plasma membrane: A signature for dyslipidemia in diabetes mellitus. Arch Biochem Biophys,2017, 635, 27-36.	3.01